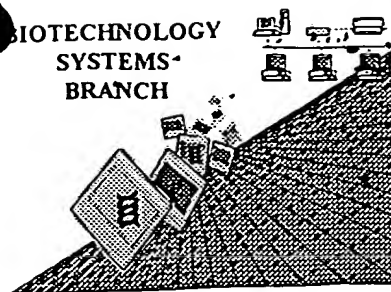


RAW SEQUENCE LISTING
ERROR REPORT

File Copy

BIOTECHNOLOGY
SYSTEMS-
BRANCH



The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/518763
Source: AU 1636
Date Processed by STIC: 10/01/01

RECEIVED

NOV 13 2001

TECH CENTER 1600/2900

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

The Checker Version 3.0 application is a state-of-the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 - 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:

<http://www.uspto.gov/web/offices/pac/checker>

RECEIVED

NOV 13 2001

Raw Sequence Listing Error Summary

TECH CENTER 1600/2900

SERIAL NUMBER: 09/518763

ERROR DETECTED

SUGGESTED CORRECTION

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO

- 1 Wrapped Nucleics
 Wrapped Aminos The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
- 2 Invalid Line Length The rules require that a line not exceed 72 characters in length. This includes white spaces.
- 3 Misaligned Amino
 Numbering The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
- 4 Non-ASCII The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
- 5 Variable Length Sequence(s) contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
- 6 PatentIn 2.0
 "bug" A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequence(s) . Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
- 7 Skipped Sequences
 (OLD RULES) Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence:
 (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
 (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
 (ii) SEQUENCE DESCRIPTION: SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
 This sequence is intentionally skipped

 Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
- 8 Skipped Sequences
 (NEW RULES) Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence
 <210> sequence id number
 <400> sequence id number
 000
- 9 Use of n's or Xaa's
 (NEW RULES) Use of n's and/or Xaa's have been detected in the Sequence Listing.
 Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.
 In <220> to <223> section, please explain location of n or Xaa; and which residue n or Xaa represents.
- 10 ✓ Invalid <213>
 Response Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
- 11 Use of <220> Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses.
 Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.
 (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
- 12 PatentIn 2.0
 "bug" Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
- 13 Misuse of n n can only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide.

AMC/MH - Biotechnology Systems Branch - 08/21/2001

The type of errors shown exist throughout the Sequence Listing. Please check subsequent sequences for similar errors.

1636

RAW SEQUENCE LISTING

DATE: 10/01/2001

PATENT APPLICATION: US/09/518,763

TIME: 09:47:31

Input Set : A:\PTO.txt

Output Set: N:\CRF3\10012001\I518763.raw

3 <110> APPLICANT: Boyce Thompson Institute for Plant Research
 4 Blissard, Gary
 5 Robert, Granados
 6 Guangyun, Lin
 8 <120> TITLE OF INVENTION: STABLE CELL LINES RESISTANT TO APOPTOSIS AND NUTRIENT STRESS
 AND METHODS

9 OF MAKING SAME

11 <130> FILE REFERENCE: BTI-44

13 <140> CURRENT APPLICATION NUMBER: US 09/518,763

14 <141> CURRENT FILING DATE: 2000-03-03

16 <160> NUMBER OF SEQ ID NOS: 11

18 <170> SOFTWARE: PatentIn version 3.0

20 <210> SEQ ID NO: 1

21 <211> LENGTH: 900

22 <212> TYPE: DNA

23 <213> ORGANISM: Autographa californica nucleopolyhedrovirus

25 <400> SEQUENCE: 1

26 atgtgtgtaa tttttccggt agaaatcgac gtgtcccaga cgattattcg agattgtcag 60
 28 gtggacaaac aaaccagaga gttggtgtac attaacaaga ttatgaacac gcaattgaca 120
 30 aaacccgttc tcatgatgtt taacatttcg ggtcctatac gaagcggtac gcgcaagaac 180
 32 aacaatttgc gcgacagaat aaaatcaaaa gtogatgaac aatttgatca actagaacgc 240
 34 gattacagcg atcaaattgga tggattccac gatagcatca agtattttaa agatgaacac 300
 36 tattcggtaa gttgccaaaa tggcagcggtg ttgaaaagca agtttgctaa aattttaaag 360
 38 agtcatgatt ataccgataa aaagtctatt gaagcttacg agaaatactg tttgccc aaa 420
 40 ttggtcgacg aacgcaacga ctactacgtg gcggtatgcg tgttgaagcc gggatttgag 480
 42 aacggcagca accaagtgtc atctttcgag tacaaccgga ttggtaacaa agttattgtg 540
 44 cggtttgctc acgaaattaa cgacacggga ctttacgagt acgacgtcgt agcttacgtg 600
 46 gacagtgtgc agtttgatgg cgaacaattt gaagagtttg tgcagagttt aatattgccg 660
 48 tcgtcggttca aaaattcgga aaagggttta tattacaacg aagcgtcgaa aaacaaaagc 720
 50 atgatctaca aggtcttaga gtttactaca gaatcgagct ggggcaaatac cgaaaagtat 780
 52 aattggaaaa ttttttgtaa cggttttatt tatgataaaa aatcaaaaagt gttgtatgtt 840
 54 aaattgcaca atgtaactag tgcactcaac aaaaatgtaa tattaaacac aattaaataa 900

57 <210> SEQ ID NO: 2

58 <211> LENGTH: 299

59 <212> TYPE: PRT

60 <213> ORGANISM: Autographa californica nucleopolyhedrovirus

62 <400> SEQUENCE: 2

64 Met Cys Val Ile Phe Pro Val Glu Ile Asp Val Ser Gln Thr Ile Ile
 65 1 5 10 15
 67 Arg Asp Cys Gln Val Asp Lys Gln Thr Arg Glu Leu Val Tyr Ile Asn
 68 20 25 30
 70 Lys Ile Met Asn Thr Gln Leu Thr Lys Pro Val Leu Met Met Phe Asn
 71 35 40 45
 73 Ile Ser Gly Pro Ile Arg Ser Val Thr Arg Lys Asn Asn Asn Leu Arg
 74 50 55 60
 76 Asp Arg Ile Lys Ser Lys Val Asp Glu Gln Phe Asp Gln Leu Glu Arg
 77 65 70 75 80
 79 Asp Tyr Ser Asp Gln Met Asp Gly Phe His Asp Ser Ile Lys Tyr Phe

Does Not Comply
 Corrected Diskette Needed

See page 2
 and Error Summary Sheet
 Item 10

RAW SEQUENCE LISTING

DATE: 10/01/2001

PATENT APPLICATION: US/09/518,763

TIME: 09:47:31

Input Set : A:\PTO.txt

Output Set: N:\CRF3\10012001\I518763.raw

```

80          85          90          95
82 Lys Asp Glu His Tyr Ser Val Ser Cys Gln Asn Gly Ser Val Leu Lys
83          100          105          110
85 Ser Lys Phe Ala Lys Ile Leu Lys Ser His Asp Tyr Thr Asp Lys Lys
86          115          120          125
88 Ser Ile Glu Ala Tyr Glu Lys Tyr Cys Leu Pro Lys Leu Val Asp Glu
89          130          135          140
91 Arg Asn Asp Tyr Tyr Val Ala Val Cys Val Leu Lys Pro Gly Phe Glu
92 145          150          155          160
94 Asn Gly Ser Asn Gln Val Leu Ser Phe Glu Tyr Asn Pro Ile Gly Asn
95          165          170          175
97 Lys Val Ile Val Pro Phe Ala His Glu Ile Asn Asp Thr Gly Leu Tyr
98          180          185          190
100 Glu Tyr Asp Val Val Ala Tyr Val Asp Ser Val Gln Phe Asp Gly Glu
101          195          200          205
103 Gln Phe Glu Glu Phe Val Gln Ser Leu Ile Leu Pro Ser Ser Phe Lys
104          210          215          220
106 Asn Ser Glu Lys Val Leu Tyr Tyr Asn Glu Ala Ser Lys Asn Lys Ser
107 225          230          235          240
109 Met Ile Tyr Lys Ala Leu Glu Phe Thr Thr Glu Ser Ser Trp Gly Lys
110          245          250          255
112 Ser Glu Lys Tyr Asn Trp Lys Ile Phe Cys Asn Gly Phe Ile Tyr Asp
113          260          265          270
115 Lys Lys Ser Lys Val Leu Tyr Val Lys Leu His Asn Val Thr Ser Ala
116          275          280          285
118 Leu Asn Lys Asn Val Ile Leu Asn Thr Ile Lys
119          290          295
121 <210> SEQ ID NO: 3
122 <211> LENGTH: 38
123 <212> TYPE: DNA
124 <213> ORGANISM: synthetic construct
126 <400> SEQUENCE: 3
127 ctagaagttag gaaagatgcc agcggctggt cgtaatat
130 <210> SEQ ID NO: 4
131 <211> LENGTH: 38
132 <212> TYPE: DNA
133 <213> ORGANISM: synthetic construct
135 <400> SEQUENCE: 4
136 ctagtctatta cgaccagccg ctggcatctt tccaactt
139 <210> SEQ ID NO: 5
140 <211> LENGTH: 30
141 <212> TYPE: DNA
142 <213> ORGANISM: synthetic construct
144 <400> SEQUENCE: 5
145 cagaattcat gtgtgtaatt ttccggtag
148 <210> SEQ ID NO: 6
149 <211> LENGTH: 33
150 <212> TYPE: DNA
151 <213> ORGANISM: synthetic construct

```

Errored: Invalid 213 response.
 Appropriate responses are "Artificial Sequence",
 "Unknown" or the name of some
 specific species.

See Error Summary Sheet.

FYI: A 213 response of "Artificial
 Sequence" requires an explanation
 for example "synthetic ~~construct~~ construct"
 in field 223.

The type of errors shown exist throughout
 the Sequence Listing. Please check subsequent
 sequences for similar errors.

RAW SEQUENCE LISTING

DATE: 10/01/2001

PATENT APPLICATION: US/09/518,763

TIME: 09:47:31

Input Set : A:\PTO.txt

Output Set: N:\CRF3\10012001\I518763.raw

```

153 <400> SEQUENCE: 6
154 ttttgctcta gatttaattg tgtttaatat tac 33
157 <210> SEQ ID NO: 7
158 <211> LENGTH: 35
159 <212> TYPE: DNA
160 <213> ORGANISM: synthetic construct
162 <400> SEQUENCE: 7
163 aatgctctag attatttaat tgtgtttaat attac 35
166 <210> SEQ ID NO: 8
167 <211> LENGTH: 15
168 <212> TYPE: DNA
169 <213> ORGANISM: synthetic construct
171 <400> SEQUENCE: 8
172 ttaaacacaa ttaaa 15
175 <210> SEQ ID NO: 9
176 <211> LENGTH: 5
177 <212> TYPE: PRT
178 <213> ORGANISM: synthetic construct
180 <400> SEQUENCE: 9
182 Leu Asn Thr Ile Lys
183 1 5
185 <210> SEQ ID NO: 10
186 <211> LENGTH: 54
187 <212> TYPE: DNA
188 <213> ORGANISM: synthetic construct
190 <400> SEQUENCE: 10
191 ttaaacacaa ttaaattctag aagttggaaa gatgccagcg gctgggtcgta atag 54
194 <210> SEQ ID NO: 11
195 <211> LENGTH: 16
196 <212> TYPE: PRT
197 <213> ORGANISM: synthetic construct
199 <400> SEQUENCE: 11
201 Leu Asn Thr Ile Lys Ser Arg Ser Trp Lys Asp Ala Ser Gly Trp Ser
202 1 5 10 15

```

VERIFICATION SUMMARY

DATE: 10/01/2001

PATENT APPLICATION: US/09/518,763

TIME: 09:47:32

Input Set : A:\PTO.txt

Output Set: N:\CRF3\10012001\I518763.raw